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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,486	06/25/2001	Hideo Yokota	8305-210US (NP102-1)	9376

570 7590 07/18/2003

AKIN GUMP STRAUSS HAUER & FELD L.L.P.  
ONE COMMERCE SQUARE  
2005 MARKET STREET, SUITE 2200  
PHILADELPHIA, PA 19103-7013

EXAMINER

MCAVOY, ELLEN M

ART UNIT	PAPER NUMBER
1764	16

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS/6

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/891,486	YOKOTA ET AL.	
	Examiner	Art Unit	
	Ellen M McAvoy	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 07 April 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-7, 10, 11, 13-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 17 and 20 is/are allowed.
- 6) Claim(s) 1-6, 10, 11, 13-15, 18, 19 and 24 is/are rejected.
- 7) Claim(s) 7 and 21-23 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <u>15</u>
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 10-11, 13-15, 18, 19 and 24 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Zielinski (5,756,430).

Applicants' arguments filed 7 April 2003 have been fully considered but they are not persuasive. As previously set forth, Zielinski discloses a mist oil lubricant which distributes fine droplets of oil compositions in aerosol form to the areas of various machine elements to be lubricated. The compositions comprise (A) 90-95 percent by weight of an ester oil having a viscosity of 10-150 cSt at 40°C; (B) 3-5 percent of an additive selected from rust and corrosion inhibitors including dibasic acids, anti-wear agents such as sulfurized fatty acids, anti-foam agents, antioxidants such as arylamines and phenolic antioxidants, demulsifiers such as monohydric alcohols, extreme pressure agents and mixtures thereof, and (C) 1-5 percent of a polyisobutylene stray mist suppressant, which meets the claim limitation of 0 to 70 percent by mass of a base oil, because applicants teach in the specification on page 26 that suitable base oils include polybutenes. See the claims of Zielinski. The examiner is of the position that component (B) of Zielinski meets the limitations of several of the oiliness improvers cited in the dependent claims such as alcohols and sulfurized fatty acids. Suitable ester oils are set forth in col. 2, lines 23-41, and include straight and branched chain alkyl esters of aromatic or aliphatic

polycarboxylic acids. Applicants argue that Zielinski does not teach or suggest the application of the oil composition to metal working, in particular cutting and grinding. Zielinski does teach applying the oil composition to “a metal surface to be lubricated”. See claim 7. Independent claim 1 is drawn to an oil composition comprising up to 100% by mass of an ester, any ester, which has a kinematic viscosity of 1 to 100 mm<sup>2</sup>/s at 40°C. As previously set forth, the intended use language of independent claim 1 of “a cutting or grinding oil composition for a minimal quantity lubrication system” carries little if any weight in the composition claim. As set forth in MPEP 2111.02, intended use recitations and other functional language in the preamble cannot be entirely disregarded. However, the intended use *must result in a structural difference* between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Thus, the intended use may further limit the claim if it does more than merely state the purpose or intended use. Here, the preamble merely states an intended use which fails to further limit the composition. Thus, the examiner maintains the position that the mist oil lubricant of Zielinski clearly meets the limitations of the oil composition of independent claim 1 and of claims depending from independent claim 1 containing additional additives which are also taught as suitable additives by Zielinski.

Applicants also argue that Zielinski does not teach or suggest that the oil composition have a kinematic viscosity of 1 to 100 mm<sup>2</sup>/s (cSt) at 40°C as claimed. As previously set forth, Zielinski teaches that the ester oil, which comprises 90-95% of the composition, has a viscosity of 10-150 cSt at 40°C. The examiner is of the position that the final oil composition, which may

contain 1-5% of a polyisobutylene stray mist suppressant having a molecular weight from about 400 to 2500, may and most likely does have a final viscosity of less than 100 cSt at 40°C to be within the claimed range for viscosity.

The rejection of claims 1, 7, 10, 11 and 20-23 under 35 U.S.C. 103(a) as being unpatentable over Koyama et al (5,171,903), alone, or in combination with Ott (6,085,782) has been withdrawn in view of applicants amendments and arguments.

***Allowable Subject Matter***

Claims 17, drawn to a minimal quantity lubrication system for cutting and grinding, and claim 20, drawn to a method for cutting or grinding a work, are allowed.

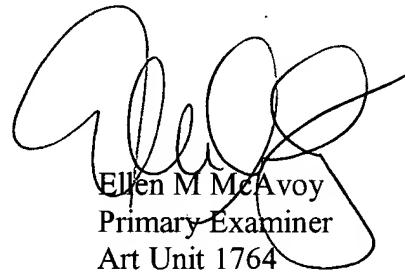
Claims 7, 21, 22 and 23 which limit the ester component to the reaction between a polyhydric alcohol and a monobasic acid, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M McAvoy whose telephone number is (703) 308-2510. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Calderola can be reached on (703) 308-6824. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Ellen M McAvoy  
Primary Examiner  
Art Unit 1764

EMcAvoy  
July 9, 2003